1993 Energy Strategy Recommendations Related to Electricity and Natural Gas

Recommendations	
Natural Gas Planning	**Updated Status**
1. Gas utilities should implement cost-effective conservation measures and programs in their service territories consistent with their least-cost plans.	Each of the four investor-owned natural gas companies are currently implementing programs that capture cost-effective energy efficiency savings for their customers. Puget Sound Energy (PSE) is moving ahead with a $2.2 million annual program. Avista continues to implement a $940,000 program. Cascade Natural Gas is initiating a program with an $800,000 budget. Northwest Natural Gas expended $69,000 in Washington for conservation programs in 2001.
2. The state's electric and gas utilities should work closely with WSEO (now CTED) and the UTC to integrate their least-cost planning.	PSE and Avista each produce simultaneous plans for their natural gas and their electric utilities. These least cost plans are not strictly integrated across both fuels.
3. WSEO (now CTED) -in cooperation with UTC, utilities, the Bonneville Power Administration (BPA), and the Northwest Power Planning Council (NWPPC), should provide a report to the governor and legislature clearly identifying the nature and extent of savings available from cost-effective fuel choice.	In 1994 the report entitled "*Fuel Blind Integrated Resource Planning Project*" was published. In the 2002 PSE general rate case PSE adopted line extension policies that encourage, rather than discourage, developers to build energy efficient housing and to select an efficient fuel source for home heating. In 2001 CTED published a report entitled "*Convergence: Natural Gas and Electricity in Washington,*" after receiving review comments from both the WUTC and the NWPPC. This report encouraged the state to adopt policies that promote the use of natural gas for on-site heating applications as an efficient use of natural gas, rather than relying on natural gas to generate electricity which would then provide on-site heating in buildings and residences. "The NWPPC recognizes that there are applications in which it is more energy efficient to use natural gas directly than to generate electricity from natural gas and then use the electricity in the end-use application. The NWPPC also recognizes that in many cases the direct use of natural gas can be more economically efficient. These potentially cost-effective reductions in electricity use, while not defined as conservation in the sense the NWPPC uses the term, are nevertheless alternatives to be considered in planning for future electricity requirements." (Council document 2001-17)
4. The state should encourage electric utilities to consider fuel choice as a resource in their least-cost planning and to implement appropriate programs.	PSE is beginning a fuel-switching pilot in September 2002. PSE's intent is to target distribution constrained areas. Avista has operated a fuel-switching program for years. Avista staff have collaborated with the Spokane Neighborhood Assistance Program on low-income household fuel switching.
5. The state should encourage BPA to review its new experimental fuel choice program and refine it where it can be shown that fuel choice is cost-effective and reduces the need to use gas for electricity generation.	The state is not currently working with BPA on a fuel choice program. The NWPPC is examining fuel choice as part of the Fifth Power Plan.
6. The state's gas and electric utilities should provide clear information to support cost-effective fuel choices.	We only have information for Avista Utilities that indicates they do inform customers of cost-effective fuel choices.

Conservation in Use of Electricity	Updated Status
7. The state should support the aggressive pursuit of all cost-effective conservation and efficiency opportunities in both public and private utility markets.	CTED works in a number of forums to support the aggressive pursuit of all cost-effective conservation and efficiency opportunities. A CTED staff member has recently served on Seattle City Light's Conservation Acceleration Committee; served as a consultant to Public Counsel of the AGO for PSE's rate case in negotiating a new level of achievement for PSE in conservation and renewable resources; has served on the technical advisory committees for Avista, PSE, and occasionally PacifiCorp. CTED has a seat on the board of the Northwest Energy Efficiency Alliance (NEEA) encouraging investments in energy efficiency programs, market research, and demonstration projects. CTED was an active contributor to the development and promotion of the Governor's energy diversity bill in 2001, which encouraged a minimum level of achievement in both energy efficiency and renewable resources for electric utilities in the state. CTED staff are currently informing the development of conservation language in the customers 20-year proposal for BPA and CTED has a representative on the NWPPC's Conservation and Renewables Advisory Committee.
8. The state should support the effort to develop and implement regulatory approaches that align private utilities' financial interests with the successful implementation of their least-cost plans.	To be updated.
9. BPA should develop better incentives and market conditions to ensure the successes of conservation investments in service areas of public utilities -- both larger utilities in major urban growth areas and smaller utilities in slow-load growth areas.	CTED staff worked with utilities and BPA on the development of the Conservation and Renewables Discount (C&RD) Program. BPA is implementing the C&RD program and its Conservation Augmentation program through 2006. BPA is considering revisions to make the C&RD a more rigorous program. There are still additional cost-effective electricity savings available in the service territory of BPA's customers.
10. The state should regularly revise state commercial and residential building codes to achieve the region's conservation targets.	The State Building Code Council adopted meaningful residential and non-residential energy code upgrades in 2001 that achieve cost-effective savings of electricity and natural gas. The residential updates were the first significant updates since 1991. A variety of state representatives were actively involved in the analysis and promotion of these code updates.
11. BPA and the investor-owned gas and electric utilities should include the cost of supporting code implementation (education, training, and enforcement) as a high priority for funding.	In Washington, a variety of energy utilities provide support for adopting codes. NEEA, funded by the NW's electric utilities provides support for code analysis and some new code training in Washington.
12. The NWPPC, WSEO (now WSU), UTC, BPA, and utilities should cooperate in the development of a set of standard and uniform principles for evaluating cost-effectiveness and verifying the performance of BPA and utility financed conservation measures.	The NWPPC and the BPA have established the Regional Technical Forum (RTF) as the entity to establish standard practices for evaluating conservation programs and determining technology and program cost-effectiveness. CTED assisted the development of the RTF by funding a representative on the RTF for it's first 18 months; their role was to focus on the calculation of cost-effectiveness.
13. The state and region should take full advantage of all federal funds available for supporting conservation technology transfer and demonstration.	CTED continues to administer US Department of Energy (USDOE) programs for the state that support energy efficiency and renewables. Federal and oil overcharge funds are passed through to WSU, General Administration (G.A), & Department of Transportation (DOT). For FY03, WSU and GA have successfully competed for eight USDOE Special Projects totaling over $900,000 in federal funds and using $3.7 million in matching funds from a wide variety of partners. The projects include alternative fuels, combined heat and power, energy efficient codes, solar, and industrial technologies.

14. The State Board for Community and Technical Colleges and the Higher Education Coordinating Board should develop curricula and provide training and certification programs for energy-related specializations.	NEEA has funded a program, administered through GA, for building commissioning in public sector buildings. Washington's community colleges have been the most active in this program.
15. The state should vigorously pursue programs that ensure that the public buildings are constructed and operated to use energy efficiently.	Revised Energy Life Cycle Cost Analysis Guidelines for public agencies were published in 1998. GA is actively promoting building commissioning and private sector performance contracting with K-12 schools, higher education, cities, counties, state and federal agencies. GA manages the Plant Operations Support Program, a consortium of facilities managers and operators who share informative and operationally oriented information with other facility managers. Additional information is available at *http://www.ga.gov/plant/plantops.htm*. The Governor's Office is developing an Executive Order on sustainability in executive branch agency operations including energy use.
Improving System Efficiencies	**Updated Status**
16. The state should support cooperative multi-state analyses of the opportunity for greater seasonal electricity exchanges along the Pacific Coast.	The world has changed considerably since 1993. There is now a west-wide wholesale power market and concept of "seasonal exchanges" has lost much of its meaning. What is now at issue, of course, is the operation and oversight of that market. FERC has emerged as the central player in this arena while the Western states through such organizations as CREPC and WIEB have struggled to fashion some alternative to FERC's Standard Market Design as the paradign for structuring and regulating the western power market.
17. BPA should improve policies to boost access to interstate transmission lines and should examine shared ownership options.	BPA has implemented open access transmission to a significant degree by formally separating its power and transmission business lines. It has also attempted to assert some leadership in the northwest by participating in RTO West. However, FERC's SMD NOPR has cast doubt on the viability of voluntary RTOs. The question of equitable access to transmission – the original purpose behind FERC's Implementation of the Energy Policy Act of 1992 through orders 888 and 889 - has turned into a major struggle between the states and the federal government over the entire structure of the electricity system.
18. The U.S. Bureau of Reclamation and the U.S. Army Corps of Engineers should include turbine efficiency improvements in their budgets and promptly implement measures, in view of rising regional power demand and the low cost and impact of these resources.	Congress has authorized BPA to contract directly with the Bureau and the Corps to make needed improvements on the hydro system. BPA has developed a long-term plan to make those improvements and is doing so within its budget constraints.
Renewable Energy Sources	**Updated Status**
19. Utilities and BPA should experiment with targeted solicitations for renewable resources that are nearly competitive with gas.	This recommendation is outdated based on changes in the industry since the 1993 Energy Strategy was written. BPA has created the Bonneville Environmental Foundation to fund investments in renewable energy resources and to market that power to customers. Other Northwest utilities are investigating "green power" development and purchases. CTED is tracking developments and encouraging renewable resource development and policies. BPA has released an RFP for wind resources and secured ____ aMW in the last two years.
20. NWPPC, BPA, UTC, and utilities should move quickly to improve their ability to evaluate the full range of benefits from renewable energy technologies.	The NWPPC continues to inventory and evaluate renewable energy projects and technologies. WSU's Energy Program remains the main state level involvement in biomass, photovoltaics, geothermal, and related renewable energy technologies. NWPPC staff are conducting a risk analysis in their new Power Plan to assess the potential benefits of diversifying our resource base with new renewable resources.

21. The state should consider renewable energy projects, such as wind turbines, suitable on parcels of land designated as rangeland or open space.	To be updated.
Low-Income Assistance	**Updated Status**
22. The state should support funding that addresses the energy needs of low-income citizens.	The State Legislature passed a Bill in 2001 that enabled the WUTC to approve lower rates for low-income households. The WUTC has approved low-income rates or rate assistance programs for each of the three investor-owned utilities in Washington. In 2001, the legislature directed state funds, for the first time , to supplement federal funds for low-income heating bill assistance in Washington. This was one –time budget provision.
23. CTED should work with WSEO, the AG's Office, and electric and gas utilities to ensure that low-income weatherization programs address energy savings for the largest number of low-income citizens possible.	CTED continues to work with the WUTC, utility collaboratives, low-income energy and housing advocates, technical advisory groups, and BPA to secure funds for low-income weatherization and energy services for low-income households.
Energy Education	**Updated Status**
24. The state should support education activities that increase the energy literacy of Washington citizens.	To be updated.
25. The legislature should provide funds to SPI to produce the second phase of the "Energy, Food, and You" curriculum.	Funding was not provided. Information in the curriculum is now seriously out of date.
26. WSEO (now CTED and WSU) should survey utilities and building operators and advise the Higher Education Coordinating Board about what programs should be developed to train technicians and system operators for conservation and efficiency work in the residential, commercial, and industrial sectors.	The Northwest Energy Efficiency Council (NEEC) is now offering a comprehensive building operator training program supported with funds for the NEEA. The program includes coordination and cooperation with the state's community colleges and vocational/technical schools.
27. The state's universities should examine their engineering and architecture programs to ensure that tomorrow's professional graduates are prepared to design facilities of all kinds with energy use in mind.	To be updated.
28. Higher education programs should include energy education units in pre-service and in-service teacher training.	No current activity.
Carbon Dioxide and Global Warming	**Updated Status**
29. WSEO (now WSU) should develop a more comprehensive inventory and projection of carbon dioxide and other greenhouse gas emissions and identify the most cost-effective measures for meeting emissions targets.	Greenhouse Gas Inventory completed 1999 "Greenhouse Gas Emissions in Washington State."
30. The state should urge our Congressional delegation to support a national carbon dioxide and greenhouse gas emission target.	To be updated.
Environmental Regulation and Energy Decision Making	**Updated Status**
31. BPA and the state's electric utilities should incorporate quantifiable costs, including environmental costs, into least-cost planning and modeling.	To be updated.

Siting Energy Facilities	Updated Status
32. The Governor should instruct his cabinet to focus its attention on implementing the provisions of the state energy strategy using existing rules, but avoiding costly duplication and ensuring rapid decision making.	Executive Order 94-01 and Chapter 207, Laws of 1994 make the Energy Strategy the primary guide for implementing the State's energy policy.
33. WSEO (now CTED) should take the lead in ensuring that supply and conservation projects consistent with the strategy receive fair and rapid treatment by the many state, federal, and local agencies that must review them.	To be updated.
34. BPA and investor-owned utilities should consider funding generic impact investigations, particularly for renewable technologies, so as to narrow the number of issues requiring study during actual siting.	To be updated.
35. The legislature should form a siting review panel, similar to the State Environmental Policy Act Review Panel of 1982-83, to develop revised state siting procedures and legislation to implement them.	Completed. EFSEC Legislation passed in 2001 (ESHB 2247.) EFSEC has begun a standards process likely to be completed in 2003.

List of Acronyms:

BPA	Bonneville Power Administration
CTED	Washington State Department of Community, Trade & Economic Development
DNR	Washington State Department of Natural Resources
EFSEC	Energy Facility Site Evaluation Council
FERC	Federal Energy Regulatory Commission
IDI	Interdisciplinary Design Institute
IndeGo	Independent Grid Operator
NEEA	Northwest Energy Efficiency Alliance
NEEC	Northwest Energy Efficiency Council
NWPPC	Northwest Power Planning Council
PSE	Puget Sound Energy
RTF	Regional Technical Forum
SPI	Washington State Superintendent of Public Instruction
UTC	Washington Utilities and Transportation Commission
WSEO	Washington State Energy Office (closed in 1996)
WSU	Washington State University Cooperative Extension Energy Program
WWP	Washington Water Power